



PATENT
Docket No.: 13199B

AFTER FINAL

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Wang et al.

Application No. 10/076,880

Filed: Feb. 13, 2002

For: REFORMING CATALYSTS AND
METHODS OF ALCOHOL STEAM
REFORMING

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Art Unit: 1754

Examiner: E. Johnson

Atty Docket: 13199B

BRIEF ON APPEAL

Board of Patent Appeals and Interferences
Commissioner for Patents
Washington, D.C. 20231

Dear Sir:

This Appeal Brief is submitted in accordance with the terms of 35 U.S.C. § 134 and 37 C.F.R. § 1.192 in response to the final Office Action mailed January 25, 2005. Appellants furnish the Appeal Brief in triplicate. The \$250 small entity processing fee (37 C.F.R. § 41.20(b)(2)) is provided in documents accompanying this Brief; any fees required for consideration of this paper can be charged to deposit account 50-1749.

I. Real Party In Interest

Battelle Memorial Institute headquartered in Columbus, Ohio, is the real party in interest.

II. Related Appeals and Interferences

None.

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III. Status of Claims

Claims 1, 5-26, and 31-34 are pending. Claims 2-4, and 27-30 have been canceled without prejudice or disclaimer. Claims 1, 5-23, 26 and 31-34 have been rejected and are the subject of this appeal.

IV. Status of Amendments

No amendments were filed subsequent to the final rejection.

V. Summary of the Invention

As can be seen from claims 1 and 5, the invention relates to catalyst comprising: a metal oxide support; a coating comprising zinc on the metal oxide support; and palladium in contact with the coating. The catalyst is further characterized by a very high volumetric productivity. The invention also includes a method of making a catalyst, in which a solution comprising dissolved zinc is combined with a solid metal oxide support. In this method, base is added to increase pH and subsequent to at least a portion of the step of adding a base, depositing Pd.

VI. Issues Presented

1. Are claims 1, 5-7, 9-15, 23, 26 and 33-34 anticipated by Wieland et al., U.S. Patent No. 6,413,449?
2. Is the "volumetric productivity" recited in claim 1 a functional limitation or an intended use?
3. If the "volumetric productivity" recited in claim 1 is categorized as an intended use, is the catalyst described in the Wieland reference "capable of performing the intended use?"
4. Does Wieland deposit Pd after a step of adding a base to increase pH?
5. Does Wieland "add" a solution comprising dissolved zinc to the solid metal oxide support?
6. Does Wieland describe a step of adding a solution in which zinc is completely dissolved?
7. Does Wieland describe a step of adding base after a zinc solution is added?
8. Are claims 16 and 22 unpatentable under 35 U.S.C. § 103 in view of the combination of Wieland et al., U.S. Patent No. 6,413,449 and Feinstein et al., U.S. Patent No. 4,177,219?
9. Is the Feinstein patent analogous art?

10. Is there a proper motivation to combine the Wieland and Feinstein patents?

VII. Grouping of Claims

In view of the rejections of record, the following groups of rejected claims will stand or fall together:

1. Claims 1, 17, 18, 21, and 23
2. Claims 16 and 22;
3. Claim 19;
4. Claim 20;
5. Claim 26;
6. Claims 5-8, 10, 11, 13, 14, 15
7. Claim 9;
8. Claim 12;
9. Claim 31;
10. Claim 32; and
11. Claim 33-34;

VIII. Argument

I. Claims 1, 17, 18, 21, and 23 Are Not Anticipated by the Wieland Patent Because the Catalyst Described in the Wieland Patent Does Not Possess the Claimed Volumetric Productivity.

Claim 1 recites that "the catalyst possesses a volumetric productivity of at least 10,000 ml H₂ / ml catalyst·hr." Appellant's specification defines "volumetric productivity" at page 3, lines 16-24. The productivity value described in Wieland is provided in terms of liquid hourly space velocity and at conditions that do not conform with applicant's definition of "volumetric productivity" at page 3, lines 16-24 which includes a specific protocol for measuring "volumetric productivity." As explained in the Declaration (filed December 13, 2004) with attached document "Comparison of MeOH Steam Reforming Catalyst with U.S. Patent 6,413,449" (hereinafter "the 132 Declaration"), calculations show that Wieland's catalyst does not inherently possess the claimed volumetric productivity. The Examiner has not disputed this showing.

The basis for patentability is simple. Appellants have claimed a catalyst that possesses a well-defined, measurable property – namely, “volumetric productivity.” Wieland’s catalyst does not possess this claimed feature. Therefore, Wieland does not anticipate the invention of claim 1.

IA. “Volumetric Productivity” is a Functional Limitation and Not an “Intended Use”

The examiner has erroneously characterized “volumetric productivity” as an intended use. “Volumetric productivity” is not an intended use¹, it is an intrinsic property of the claimed catalyst.

As stated in MPEP § 2173.05(g), “A functional limitation must be evaluated and considered, just like any other limitation of the claim, for what it fairly conveys to a person of ordinary skill in the pertinent art in the context in which it is used.” The MPEP cites *In re Swinehart*, 439 F.2d 210, 169 USPQ 226 (CCPA 1971). In *Swinehart*, the claimed invention was distinguished over the prior art, not based on a structural limitation and not based on a compositional limitation, but on a functional limitation (that the material was transparent to infrared). The invention of claim 1, which is distinguished over the prior art based on volumetric productivity (rather than transparency to infrared radiation) is entirely analogous to *In re Swinehart*. See also *Union Carbide Chems. & Plastics Tech. v. Shell Oil Co.*, 308 F.3d 1167, 64 USPQ2d 1545 (Fed. Cir. 2002) in which the Court interpreted a claim to a catalyst “characterizable” by a claimed level of “efficiency %” that is determined by testing at a given set of conditions. In the present case, the “volumetric productivity” is a functional limitation that “must be evaluated and considered, just like any other limitation of the claim.”

¹ The cases cited by the Examiner, *Otto* and *Casey*, are not relevant to Appellants’ claimed invention. In *Otto*, the claim recited:

1. As a new article of manufacture, a core member for hair curlers comprising a body of elastically resilient foam material, the hair being wound directly on said body and said body carrying a hair waving lotion in nonliquid form distributed in the pores of the material.

In re Otto, 136 USPQ (CCPA 1963). Thus, in *Otto*, “hair” was not a property of the core member. In *Casey*, the Court found that the functionally claimed feature would inherently occur in the prior art apparatus. See *In re Casey*, 152 USPQ 235, paragraph bridging pages 237-238 (CCPA 1967). In contrast, the presently claimed “volumetric productivity” is an intrinsic property of the catalyst, and it is not an inherent property of the prior art catalyst.

Swinehart and *Union Carbide*, cited in this Appeal Brief, are far more relevant to Appellant’s claimed catalyst than are the *Otto* and *Casey* cases cited by the Examiner. *Swinehart* involved claims to a composition of matter and *Union Carbide* to a catalyst in a chemical process. To the extent that *Otto* or *Casey* may conflict with *Swinehart*, *Swinehart* is the controlling legal authority since *Swinehart* was a subsequent decision of the CCPA.

IB. Even if One Adopts the Examiner's Reasoning, Claim 1 is Still Patentable Over Wieland.

In the Official Communication mailed January 25, 2005, the Examiner states: "If the prior art structure is capable of performing the intended use, then it meets the claim." Even if, *arguendo*, one adopts the Examiner's reasoning and characterizes volumetric productivity as an intended use, the claimed invention is still patentable over the Wieland patent because the Wieland catalyst is not capable of performing the claimed volumetric productivity, and thus does not meet the claim.

II. Catalyst Claims 19, 20 and 26 are Additionally Patentable Over Wieland

Claims 19 and 20 recited higher levels of volumetric productivity and are therefore still further patentable over Wieland.

Claim 26 contains an additional limitation of specific activity.

III. The Invention of Claim 5 is Not Anticipated by Wieland Because Wieland Does Not Describe a Step of "Depositing Pd" Subsequent to Adding a Base.

In the Official Communication mailed January 25, 2005, the Examiner states that "The Pd of [Wieland] is considered deposited when the final product is produced by calcining." This is erroneous. As is well-known, calcining involves heating a solid. For example, The Condensed Chemical Dictionary (9th Edition, 1977) defines calcination as "heating a solid to a temperature below its melting point to bring about a state of thermal decomposition or a phase transition other than melting." Clearly, depositing Pd does not occur during a calcining step.

Claims are interpreted from the viewpoint of a person skilled in the art. The inventors (i.e., persons skilled in the art) stated in the 132 Declaration that:

Column 7, lines 13-17 in U.S. Patent No. 6,413,449 describe a part of a process of making a catalyst having the following steps "and is then reduced at constant temperature with an aqueous reducing agent, filtered, washed, dried, calcined in an oxidizing atmosphere at temperatures from 300°C to 550°C, and finally reduced in a hydrogen-containing gas at temperatures from 350°C to 500°C." A worker of ordinary skill in the field of making catalysts would not understand this part of the process as including any step of "depositing Pd." There is no

scientific basis to believe that Pd is deposited during the steps described in this excerpt.

In the example of Wieland, the catalyst powder was filtered and washed before it was dried and calcined. If any Pd remained in solution, it would be removed by filtering and washing, and therefore could not deposit during drying or calcining. Therefore, the invention of claim 5 is not anticipated by Wieland.

IV. The Invention of Claim 5 is Further Not Anticipated by Wieland Because Wieland Does Not Describe a Step of Adding a Solution Comprising Dissolved Zinc

The method of claim 5 is further patentable over Wieland et al., because Wieland et al. do not disclose a step of adding a solution comprising dissolved zinc to a metal oxide support, nor a step of adding a solid oxide support to a solution comprising dissolved zinc. Claim 5 requires "adding a solution comprising dissolved zinc to the solid metal oxide support, or adding a solid metal oxide support to a solution comprising dissolved zinc." In contrast, Wieland et al. combine a metal oxide with insoluble zinc oxide in an aqueous dispersion. It is true that Wieland et al. state that they subsequently dissolve a portion of the zinc in the acidic Pd solution; however, this does not constitute a step of "adding" a zinc solution. In other words, Wieland et al. state that they form a zinc solution *in situ*; however, they do not "add" a solution comprising dissolved zinc. Therefore, the rejection of claim 5 should be withdrawn since Wieland et al. do not "add" a solution comprising dissolved zinc, nor a "add" a metal oxide support to a solution comprising dissolved zinc.

Appellants do not understand the response to this argument that is set forth in the Official Communication mailed January 25, 2005, and appellants assert that the Examiner's response is erroneous.

V. Method of Making Claims 9, 12, and 31-34 are Additionally Patentable Over Wieland

Claim 9 recites that the zinc is completely dissolved in solution. In contrast, Wieland et al. do not teach any step of adding zinc that is completely in solution. Note that at col. 7, lines 33-40, Wieland et al. state that the finely divided zinc oxide powder is partially dissolved by the addition of the acidic noble metal solution. Although the Examiner responded to this argument by referring to Example 1 of Wieland, Example 1 of Wieland lacks any step of adding a base. Therefore, Example 1 cannot anticipate the method of claim 5.

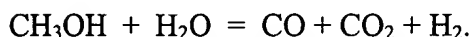
Claim 12 recites a step of adding base after the zinc solution is added, while Wieland does not add any zinc solution. The Examiner has not yet responded to applicant's argument regarding claim 12.

Claims 31-34 recite that the catalyst is prepared and reduced under hydrogen with temperatures never exceeding 400 °C. Maintaining low temperature increases catalyst life and surface area (see page 4, line 25 – page 5, line 1). All of Wieland's examples substantially exceed this temperature and, although broader ranges are mentioned, Wieland does not recognize the advantage of keeping process temperatures at 400 °C or less. Thus, claims 31-34 are patentable based on this additional ground.

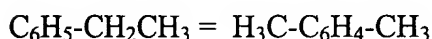
VI. Claims 16 and 22 are Patentable Over the combination of Wieland and Feinstein et al., U.S. Patent No. 4,177,219.

A. The Feinstein Patent is Not Analogous Art.

Applicant's catalyst and Wieland's catalyst relate to methanol steam reforming:



On the other hand, Feinstein relates to a method for converting (reforming²) ethyl aromatics to methyl aromatics (i.e., xylenes), for example:



The standard for analogous art is set forth in MPEP 2141.01(a) ("In order to rely on a reference as a basis for rejection of an applicant's invention, the invention must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the inventor was concerned.") See also *In re Clay*, 23 USPQ2d 1058 (Fed. Cir. 1992).

The reforming of ethyl aromatics to xylenes is not in the same field as reforming methanol to hydrogen and carbon dioxide. The chemistries are entirely different. As can be seen from the chemical equations above, one process relates to the production of H₂ while the other process relates to the production of xylenes. Thus, Feinstein's process of converting ethyl aromatics to xylenes is not analogous art.

² The only common feature shared by appellant's claimed invention and the Feinstein patent is the term "reforming." However, the reforming processes are completely different. Martin Luther attempted to reform the Catholic Church, and the juvenile justice system attempts to reform wayward youth – both of these use the term "reforming," but they too are nonanalogous art to methanol steam "reforming."

Nor is Feinstein's process "reasonably pertinent to the particular problem with which the inventor was concerned." The problem with which the inventors were concerned was the reaction of methanol with water to produce hydrogen and carbon dioxide. The problem Feinstein was concerned with was the scission of the C-C bond in the ethyl group in ethyl aromatics; this is a completely different problem. Unlike ethyl aromatics, methanol does not have any C-C bonds. Thus, catalyst compositions for the conversion of ethyl aromatics to xylenes are not reasonably pertinent to the problem with which the inventors were concerned.

Therefore, the Feinstein patent is nonanalogous art and it cannot be used in a section 103 rejection.

B. There is Not a Proper Motivation to Combine the Wieland and Feinstein patents.

The Examiner is in error in stating that "high scisson activity" of Feinstein's catalyst provides a motivation to add Ru into Wieland's catalyst. In Feinstein's process reforming ethyl aromatics to produce methyl aromatics, the scission of the C-C bond in the ethyl group is critical to forming methyl aromatics. In contrast, methanol does not have any C-C bonds. Therefore, the "high scisson activity" of Feinstein's catalyst is irrelevant to methanol steam reforming.

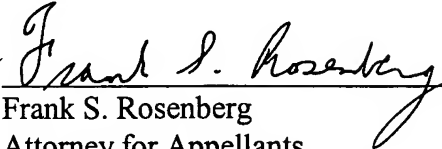
The situation is similar with regard to conversion and selectivity. Feinstein's catalyst demonstrated good conversion of ethyl aromatics. There are no ethyl aromatics in methanol steam reforming. The selectivity that Feinstein refers to is selectivity to xylenes. In contrast, methanol steam reforming produces no xylenes; with or without Ru, the selectivity to xylenes will be zero in methanol steam reforming. A worker of ordinary skill in the field of methanol steam reforming would know that the catalysts and mechanisms for converting ethyl aromatics to methyl aromatics are not relevant to the catalysts and mechanisms involved in methanol steam reforming (this is stated in the 132 Declaration). Therefore, there is not a proper motivation to combine the teachings of the Wieland and Feinstein references.

VII. Conclusion

For the foregoing reasons, appellants respectfully submit that the Examiner has erred in rejecting this application. Please reverse the Examiner on all counts.

Dated this 21st day of April, 2005.

Respectfully submitted,



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APPENDIX

1. (previously presented) A catalyst comprising:
a metal oxide support;
a coating comprising zinc on the metal oxide support; and
palladium in contact with said coating;
wherein the catalyst possesses a volumetric productivity of at least 10,000 ml H₂ / ml catalyst-hr.
2. (canceled)
3. (canceled)
4. (canceled)
5. (previously presented) A method of making a catalyst, comprising the steps of:
providing a solid metal oxide support;
adding a solution comprising dissolved zinc to the solid metal oxide support, or adding a solid metal oxide support to a solution comprising dissolved zinc;
adding a base to increase pH; and
subsequent to at least a portion of the step of adding a base, depositing Pd.
6. (original) A catalyst made by the method of claim 5.

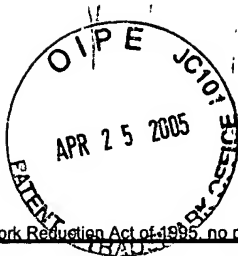
7. (Previously Presented) The method of claim 5 wherein the metal oxide support comprises alumina, titania or zirconia.
8. (Previously Presented) The method of claim 5 wherein the metal oxide support is deposited onto a large pore support.
9. (Previously Presented) The method of claim 5 comprising a step wherein the zinc is completely dissolved in said solution.
10. (Previously Presented) The method of claim 5 wherein there are no metals other than zinc in said solution.
11. (Previously Presented) The method of claim 5 wherein said solution comprises 0.1 to 3 M zinc.
12. (Previously Presented) The method of claim 5 wherein the base is added after the zinc solution is added.
13. (Previously Presented) The method of claim 12 wherein base is added to result in a pH of 7 or greater.
14. (Previously Presented) The method of claim 13 further comprising a step of calcining at 200 to 400 °C.

15. (Previously Presented) The method of claim 12 wherein Pd is deposited from a solution.
16. (previously presented) The method of claim 15 wherein the solution comprising Pd further comprises Ru.
17. (Previously Presented) The catalyst of claim 1 wherein the metal oxide support constitutes 50 to 90 wt% of the catalyst; zinc oxide constitutes 10 to 30 wt% of the catalyst; and Pd constitutes 1 to 15 wt% of the catalyst.
18. (Previously Presented) The catalyst of claim 17 wherein the metal oxide support comprises alumina, titania or zirconia.
19. (Previously Presented) The catalyst of claim 17 possessing a volumetric productivity of at least 40,000 ml H₂ / ml catalyst·hr.
20. (Previously Presented) The catalyst of claim 17 possessing a volumetric productivity of 20,000 to 90,000 ml H₂ / ml catalyst·hr.
21. (Previously Presented) The catalyst of claim 20 comprising 2 to 10 wt% Pd.
22. (Previously Presented) The catalyst of claim 21 comprising 0.2 to 5 wt% Ru.

23. (Previously Presented) The catalyst of claim 1 wherein the metal oxide forms a layer having a thickness less than 1 mm on a large pore support.
24. (Previously Presented) The catalyst of claim 23 wherein the metal oxide forms a layer having a thickness less than 40 μm , and the large pore support comprises a foam or felt.
25. (Previously Presented) The catalyst of claim 23 wherein at least 50% of the catalyst's pore volume is composed of pores in the size range of 0.3 to 200 microns.
26. (Previously Presented) The catalyst of claim 17 characterizable by a specific activity of greater than 1.5 mol methanol converted/(g catalyst)(hr) when tested at 400 °C, 25 msec contact time, 1.8 steam-to-carbon ratio with a pressure drop of less than 25 psig.
- 27-30. (Canceled)
31. (previously presented) The method of claim 5 wherein a zinc-containing layer is formed on the metal oxide support; and
further comprising a step of drying the zinc-containing layer;
wherein the step of depositing Pd occurs subsequent to said step of drying.
32. (previously presented) The method of claim 31 wherein the catalyst is prepared and reduced under hydrogen with temperatures never exceeding 400 °C.

33. (previously presented) The method of claim 15 wherein the catalyst is prepared and reduced under hydrogen with temperatures never exceeding 400 °C.

34. (previously presented) The method of claim 5 wherein the catalyst is prepared and reduced under hydrogen with temperatures never exceeding 400 °C.



THW AF
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PTO/SB/21 (09-04)

Approved for use through 07/31/2006. OMB 0651-0031
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TRANSMITTAL FORM

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Total Number of Pages in This Submission

45

Application Number	10/076,880
Filing Date	Feb 13, 2002
First Named Inventor	Wang
Art Unit	1754
Examiner Name	Edward M. Johnson
Attorney Docket Number	13199B

ENCLOSURES (Check all that apply)

<input checked="" type="checkbox"/> Fee Transmittal Form <input checked="" type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment/Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Reply to Missing Parts/ Incomplete Application <input type="checkbox"/> Reply to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____ <input type="checkbox"/> Landscape Table on CD	<input type="checkbox"/> After Allowance Communication to TC <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input checked="" type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): Credit Card payment form
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SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm Name	Frank Rosenberg		
Signature			
Printed name	Frank Rosenberg		
Date	21 April 2005	Reg. No.	37,068

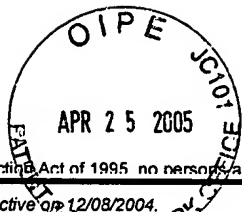
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Signature			
Typed or printed name	Esmeralda Mestizo	Date	April 21, 2005

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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Effective 12/08/2004.

Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818).

FEE TRANSMITTAL

For FY 2005

☒ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$)

250.00

Complete if Known

Application Number	10/076,880
Filing Date	Feb 13, 2002
First Named Inventor	Wang
Examiner Name	Edward M. Johnson
Art Unit	1754
Attorney Docket No.	13199B

METHOD OF PAYMENT (check all that apply)☐ Check ☒ Credit Card ☐ Money Order ☐ None ☐ Other (please identify): _____☐ Deposit Account Deposit Account Number: 50-1749 Deposit Account Name: Frank Rosenberg

For the above-identified deposit account, the Director is hereby authorized to: (check all that apply)

☐ Charge fee(s) indicated below ☐ Charge fee(s) indicated below, except for the filing fee
☒ Charge any additional fee(s) or underpayments of fee(s) under 37 CFR 1.16 and 1.17 ☐ Credit any overpayments**WARNING:** Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.**FEE CALCULATION****1. BASIC FILING, SEARCH, AND EXAMINATION FEES**

Application Type	FILING FEES		SEARCH FEES		EXAMINATION FEES		Fees Paid (\$)
	Fee (\$)	Small Entity Fee (\$)	Fee (\$)	Small Entity Fee (\$)	Fee (\$)	Small Entity Fee (\$)	
Utility	300	150	500	250	200	100	
Design	200	100	100	50	130	65	
Plant	200	100	300	150	160	80	
Reissue	300	150	500	250	600	300	
Provisional	200	100	0	0	0	0	

2. EXCESS CLAIM FEES**Fee Description**

Each claim over 20 (including Reissues)

Each independent claim over 3 (including Reissues)

Multiple dependent claims

Fee (\$)	Small Entity Fee (\$)
50	25
200	100
360	180

Total Claims **Extra Claims** **Fee (\$)** **Fee Paid (\$)**

- 20 or HP = _____ x _____ = _____

HP = highest number of total claims paid for, if greater than 20.

Indep. Claims **Extra Claims** **Fee (\$)** **Fee Paid (\$)**

- 3 or HP = _____ x _____ = _____

HP = highest number of independent claims paid for, if greater than 3.

3. APPLICATION SIZE FEE

If the specification and drawings exceed 100 sheets of paper (excluding electronically filed sequence or computer listings under 37 CFR 1.52(e)), the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).

Total Sheets	Extra Sheets	Number of each additional 50 or fraction thereof	Fee (\$)	Fee Paid (\$)
_____	_____	_____	_____	_____

- 100 = _____ / 50 = _____ (round up to a whole number) x _____ = _____

4. OTHER FEE(S)

Non-English Specification, \$130 fee (no small entity discount)

Other (e.g., late filing surcharge): Filing a brief in support of an appeal (37 C.F.R. 41.20(b)(2))**Fees Paid (\$)**

250.00

SUBMITTED BY

Signature	<u>Frank Rosenberg</u>	Registration No. (Attorney/Agent)	37,068	Telephone	925-376-8416
Name (Print/Type)	Frank Rosenberg			Date	April 21, 2005

This collection of information is required by 37 CFR 1.136. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 30 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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